

Claims

What is claimed is:

1. A clinch mechanism for a stapler that pushes and drives a staple out of a staple magazine into a stack of paper by a lowering motion of a hammer, and clinches legs of the staple that has penetrated the paper inward to hold the paper together, the clinch mechanism comprising:

a pair of base plates arranged parallel with a spacing therebetween that conforms to a direction in which the legs of the staple that has penetrated the paper are oriented;

a thin-plate partition forming equally spaced gaps on both sides thereof by halving said spacing between said pair of base plates, the partition including a pair of protruding pieces on a top side thereof respectively corresponding to each of staple legs, said protruding pieces being bent in opposite directions at a preset angle to form slanted faces that partly close said equally spaced gaps, respectively;

a pair of clinch plates rotatably arranged inside said equally spaced gaps; and

a clinch arm for rotating said pair of clinch plates simultaneously with said lowering motion of the hammer.

2. An electric stapler that pushes and drives a staple out of a staple magazine into a stack of paper by a lowering motion of a motor-driven hammer, and clinches legs of the staple that has penetrated the paper inward to hold the paper

together, the electric stapler comprising:

a support stand having a pair of upright walls facing each other;

5 a magazine holder holding said staple magazine, arranged between said upright walls, pivotable around an axis at a rear end of the support stand, and biased upwards;

a staple firing assembly including a structure for moving up and down the hammer along a vertical staple firing line at a front end of the support stand and a structure for lowering
10 said staple magazine;

a clinch mechanism having a clinch plate disposed below said staple firing line for bending staple legs;

a pair of wheel gears attached to the upright walls of the support stand, respectively, and driven by the motor
15 synchronously;

a swing arm bridging across the upright walls, turned by the pair of wheel gears to drive said staple firing assembly around a shaft that is biased downward by a pair of springs; and

20 a clinch arm turned by the pair of wheel gears to drive said clinch mechanism.

3. The electric stapler according to claim 2, wherein said clinch mechanism comprises:

a pair of base plates arranged parallel with a spacing
25 therebetween that conforms to a direction in which the legs of

the staple that has penetrated the paper are oriented;

a thin-plate partition forming equally spaced gaps on both sides thereof by halving said spacing between said pair of base plates, the partition including a pair of protruding pieces on a top side thereof respectively corresponding to each of staple legs, said protruding pieces being bent in opposite directions at a preset angle to form slanted faces that partly close said equally spaced gaps, respectively; and

a pair of clinch plates rotatably arranged inside said equally spaced gaps.